

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A surgical apparatus, comprising:
a carrier movable between an unstressed state and a deflected and stressed state;
a tissue stimulation element supported by the carrier and capable of transmitting energy, wherein the carrier is configured to press the tissue stimulation element against tissue when in the deflected and stressed state; and
a tissue engagement device carried by the carrier, the tissue engagement device being configured to secure itself to tissue by piercing tissue and to secure the carrier to the tissue in the deflected and stressed state.
2. (Canceled).
3. (Original) A surgical apparatus as claimed in claim 1, wherein the carrier includes first and second end portions and an interior portion and the carrier is configured such that the interior portion will be in spaced relation to the tissue when the end portions are in contact with the tissue and the carrier is in the unstressed state.
4. (Original) A surgical apparatus as claimed in claim 3, wherein the carrier interior portion is curved.
5. (Original) A surgical apparatus as claimed in claim 3, wherein the tissue stimulation element comprises first and second tissue stimulation elements carried on the first and second end portions.
6. (Previously Amended) A surgical apparatus as claimed in claim 5, wherein the carrier is configured to press the first and second tissue stimulation elements against the tissue when in the deflected and stressed state.

7. (Original) A surgical apparatus as claimed in claim 3, wherein the tissue engagement device is configured to hold the interior portion of the carrier substantially against the tissue.

8. (Currently Amended) A surgical apparatus, comprising:
a carrier movable between an unstressed state and a deflected and stressed state;
a tissue stimulation element supported by the carrier, wherein the carrier is configured to press the tissue stimulation element against tissue when in the deflected and stressed state; and
first and second tissue piercing members carried by the carrier and configured to secure the carrier to tissue in the stressed state.

9. (Withdrawn) A surgical apparatus as claimed in claim 1, wherein the tissue engagement device comprises a helical tissue piercing member.

10. (Withdrawn) A surgical apparatus as claimed in claim 1, wherein the tissue engagement device comprises adhesive.

11. (Original) A surgical apparatus as claimed in claim 1, wherein the tissue stimulation element comprises a stimulation electrode.

12. (Original) A surgical apparatus as claimed in claim 1, wherein the tissue stimulation element comprises a pair of stimulation electrodes.

13. (Previously Amended) A surgical apparatus for use with a tissue structure, comprising:

a tissue stimulation element; and

means, associated with the tissue stimulation element, for securing the surgical apparatus to the tissue structure by engaging a single side of the tissue structure and pressing the stimulation element against the single side of the tissue structure.

14. (Previously Amended) A surgical apparatus as claimed in claim 13, wherein the tissue stimulation element comprises a stimulation electrode.

15. (Original) A surgical apparatus as claimed in claim 14, wherein the tissue stimulation element comprises a pair of stimulation electrodes.

16. (Currently Amended) A surgical apparatus for use with tissue, comprising:
a tissue stimulation element; and
an anchor, associated with the tissue stimulation element, the anchor being configured to secure the surgical apparatus to the tissue by piercing the tissue and to press the stimulation element against the tissue when the anchor is in a deflected and stressed state.

17. (Original) A surgical apparatus as claimed in claim 16, wherein the tissue stimulation element comprises a stimulation electrode.

18. (Original) A surgical apparatus as claimed in claim 16, wherein the tissue stimulation element comprises a pair of stimulation electrodes.

19. (Original) A surgical apparatus as claimed in claim 16, wherein the anchor includes a flexible carrier.

20. (Original) A surgical apparatus as claimed in claim 19, the flexible carrier is non-linear when in a relaxed state.

21-27. (Canceled)

28. (Withdrawn - Previously Amended) A surgical system for use with tissue, comprising:

a source of stimulation energy; and

an apparatus, operably connected to the source of stimulation energy, including

a tissue stimulation element, and

an anchor, associated with the tissue stimulation element, the anchor being configured to secure the surgical apparatus to the tissue by piercing the tissue and press the stimulation element against the tissue.

29. (Withdrawn) A surgical system as claimed in claim 28, wherein the tissue stimulation element comprises a stimulation electrode.

30. (Withdrawn) A surgical system as claimed in claim 28, wherein the tissue stimulation element comprises a pair of stimulation electrodes.

31. (Previously Amended) A surgical apparatus as claimed in claim 1, the tissue stimulation element having a diameter of about 0.5mm to 1.0mm in diameter, wherein a size of the tissue stimulation element is too small to form a transmural myocardial lesion.

32. (Currently Amended) ~~A surgical apparatus as claimed in claim 13,~~ A surgical apparatus for use with a tissue structure, comprising:

a ~~the~~ tissue stimulation element having a diameter of about 0.5mm to 1.0mm ~~in diameter~~, wherein a size of the tissue stimulation element is too small to form a transmural myocardial lesion; and

means, associated with the tissue stimulation element, for securing the surgical apparatus to the tissue structure by engaging a single side of the tissue structure and pressing the stimulation element against the single side of the tissue structure.

33. (Currently Amended) ~~A surgical apparatus as claimed in claim 16;~~ A surgical apparatus for use with tissue, comprising:

~~a the~~ tissue stimulation element having a diameter of about 0.5mm to 1.0mm-in diameter, wherein a size of the tissue stimulation element is too small to form a transmural myocardial lesion; and

an anchor, associated with the tissue stimulation element, the anchor being configured to secure the surgical apparatus to the tissue by piercing the tissue and pressing the stimulation element against the tissue.

34. (Previously Presented) A surgical apparatus for use with a tissue surface, comprising:

first and second tissue stimulation elements;

a flexible carrier movable between an unstressed state and a deflected and stressed state and including a first end portion that carries the first tissue stimulation element, a second end portion that carries the second tissue stimulation element, and a curved interior portion located between the first and second end portions and configured such that the curved interior portion will be in spaced relation to the tissue surface when the end portions are in contact with the tissue surface and the carrier is in the unstressed state; and

a tissue engagement device carried by the curved interior portion of the carrier between the first and second tissue stimulation elements and configured to secure the carrier to the tissue surface in the deflected and stressed state.

35. (Previously Presented) A surgical apparatus as claimed in claim 34, wherein the carrier is configured to press the tissue stimulation element against the tissue surface when in the deflected and stressed state.

36. (Previously Presented) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device is configured to hold the curved interior portion of the carrier substantially against the tissue surface.

37. (Previously Presented) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device comprises first and second tissue piercing members.

38. (Withdrawn) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device comprises a helical tissue piercing member.

39. (Withdrawn) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device comprises adhesive.

40. (Previously Presented) A surgical apparatus as claimed in claim 34, wherein the first and second tissue stimulation elements comprises first and second stimulation electrodes.

41. (Currently Amended) A surgical apparatus as claimed in claim 34, the first and second tissue stimulation elements each having a diameter of about 0.5mm to 1.0mm in diameter, wherein a size of each tissue stimulation element is too small to form a transmural myocardial lesion.

42. (Previously Presented) The surgical apparatus of claim 1, the tissue engagement device having a sharpened end for piercing tissue.

43. (Previously Presented) The surgical apparatus of claim 13, the means for securing the surgical apparatus to the tissue having a sharpened end for piercing tissue.